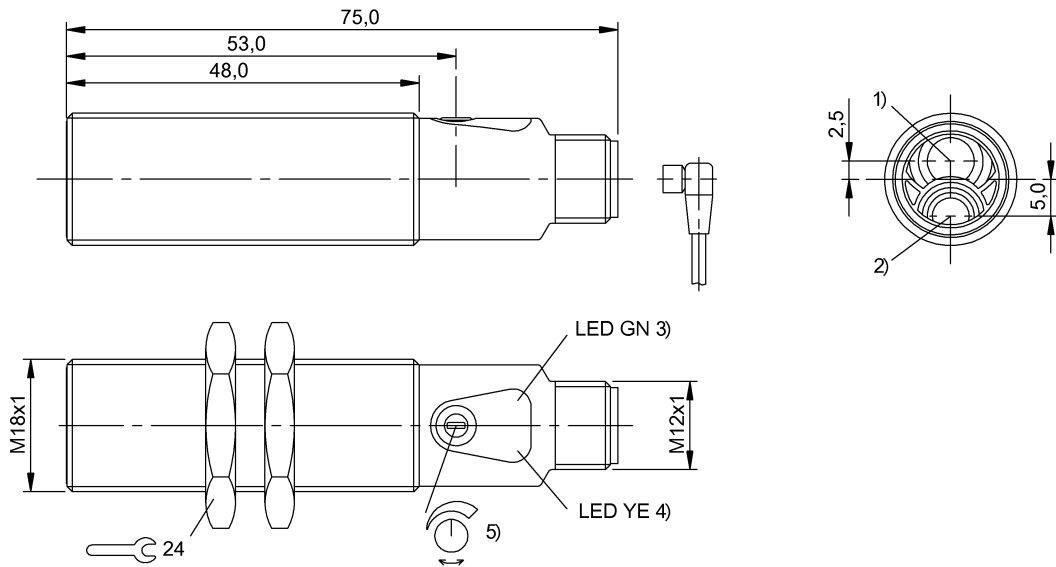


BOS 18M-PA-ID20-S4 BOS01EY



1) Optical axis receiver 2) Optical axis emitter 3) Operating voltage 4) Light reception/limit area 5) Sn



Display/Operation

| | |
|----------|-------------------------------|
| Adjuster | Potentiometer 270° (1x) |
| Setting | Rated switching distance (Sn) |

Electrical connection

| | |
|-----------------------------|----------------------------------|
| Connection | M12x1-Connector, 4-pole, A-coded |
| Contact, surface protection | Gold plated |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|--|-------------|
| Hysteresis H max. (% of Sr) | 10.0 % |
| Load capacitance max. at Ue | 0.1 µF |
| No-load current I _o max. at Ue | 30 mA |
| Operating voltage U _b | 10...30 VDC |
| Pollution degree | 3 |
| Protected against miswiring | yes |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e DC | 100 mA |
| Rated operating voltage U _e DC | 24 V |
| Switching frequency | 400 Hz |
| Turn-off delay t _{off} max. | 1.25 ms |
| Turn-on delay t _{on} max. | 1.25 ms |
| Utilization category | DC -13 |
| Voltage drop U _d max. at I _e | 2.5 V |

Environmental conditions

| | |
|---------------------|------------|
| Ambient temperature | -5...55 °C |
| Protection class | II |

Internet www.balluff.com
 Balluff Germany +49 (0) 7158 173-0, 173-370
 Balluff USA 1-800-543-8390
 Balluff China +86 (0) 21-50 644131

Protection type IEC 60529

IP67

General data

| | |
|---------------------|-----------------------------|
| Approval/Conformity | cULus CE |
| Basic standard | IEC 60947-5-2 |
| Series | 18M |
| Style | Cylinder Straight optics |

Material

| | |
|--------------------------|---------------|
| Housing material | Brass |
| Material sensing surface | Glass |
| Surface protection | nickel plates |

Mechanical data

| | |
|------------------------|----------------|
| Dimension | Ø 18 x 75 mm |
| Fastening detail | Nut M18x1 |
| Tightening torque max. | 15 Nm 30 Nm |

Optical data

| | |
|-------------------------|--------------|
| Ambient light max. | 5000 Lux |
| Beam characteristic | Divergent |
| LED group per IEC 62471 | Exempt Group |
| Light type | Infrared |
| Wave length | 850 nm |

For definitions of terms, see main catalog
 Subject to change without notice

eCl@ss 9.1: 27-27-09-03
 ETIM 6.0: EC001821
 BOS01EY_13-03-17_18:36

BOS 18M-PA-ID20-S4 BOS01EY

| | |
|----------------------------------|------|
| Ripple max. (% of Ue) | 15 % |
| Temperature drift max. (% of Sr) | 10 % |

Output/Interface

| | |
|------------------|--|
| Switching output | PNP Normally closed (NC) PNP Normally open (NO) |
|------------------|--|

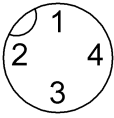
Remarks

Order accessories separately.
For additional information, refer to user's guide.
Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.
The sensor is functional again after the overload has been eliminated.

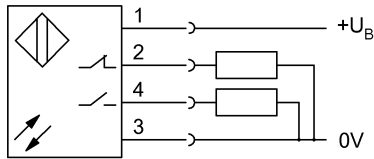
Range/Distance

| | |
|---|--------------------|
| Measuring range | 1...800 mm |
| Range | 1...800 mm |
| Rated operating distance S _n | 800 mm, Adjustable |

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors

